Royal University of Phnom Penh

Faculty of Engineering

Semester 1 – Web and Cloud Technology I

Lecturer: Vean Viney

Group 12

1. **Phay Sothiya**
2. **Puth Darasokchea**
3. **Phorn Panhaudom**
4. **Bun Sovann**

Project: Ai chatbot

1. Introduction

XYZ Chatbot is a smart virtual assistant designed to give helpful responses and support similar to ChatGPT. This chatbot uses the Gemini API to understand and answer user questions, help with programming tasks, and provide creative ideas.

2. Problem Statement

"Students often face difficulty understanding complex topics and lack support outside of class, making self-study challenging."

3. Why is it important?

- Students often face difficulty understanding complex topics and lack immediate support outside of class, making self-study challenging.
- responses based on each user's questions, making it easier for students to learn at their own pace and focus on areas they find challenging.

- learning to code or working on technical tasks, *Jahh Chatbot* offers guidance, debug assistance, and code explanations, bridging the gap between self-study and real-time support.

4. Project vision

Our Chatbot is to be a flexible tool for many uses, like learning new topics, getting advice on technical issues, or finding solutions to everyday questions. With its language abilities, *Jahh Chatbot* can respond naturally and adapt to different user needs, making it useful in both personal and professional settings.

5. Limitation

- Text-Only: currently we focus only on text-based responses, meaning users cannot upload photos or diagrams. This limits its ability to help with visual learning or analyze images.

6. How we will execute this project

- Clearly outline the features and functionalities of *Jahh Chatbot*, including text-based interactions and areas of focus (e.g., study help, coding assistance).
- Design prototype

- We use HTML, CSS, JAVASCRIPT for front-end.
- Write the code for handling user input, processing it through the Gemini API, and displaying responses.
- Conduct thorough testing to identify bugs, improve performance, and ensure the chatbot responds accurately to user queries.
- Launch *XYZ Chatbot* on the chosen platform, making it accessible to users.
- Maintenance and Updates: Regularly update the chatbot based on user feedback and advancements in technology.

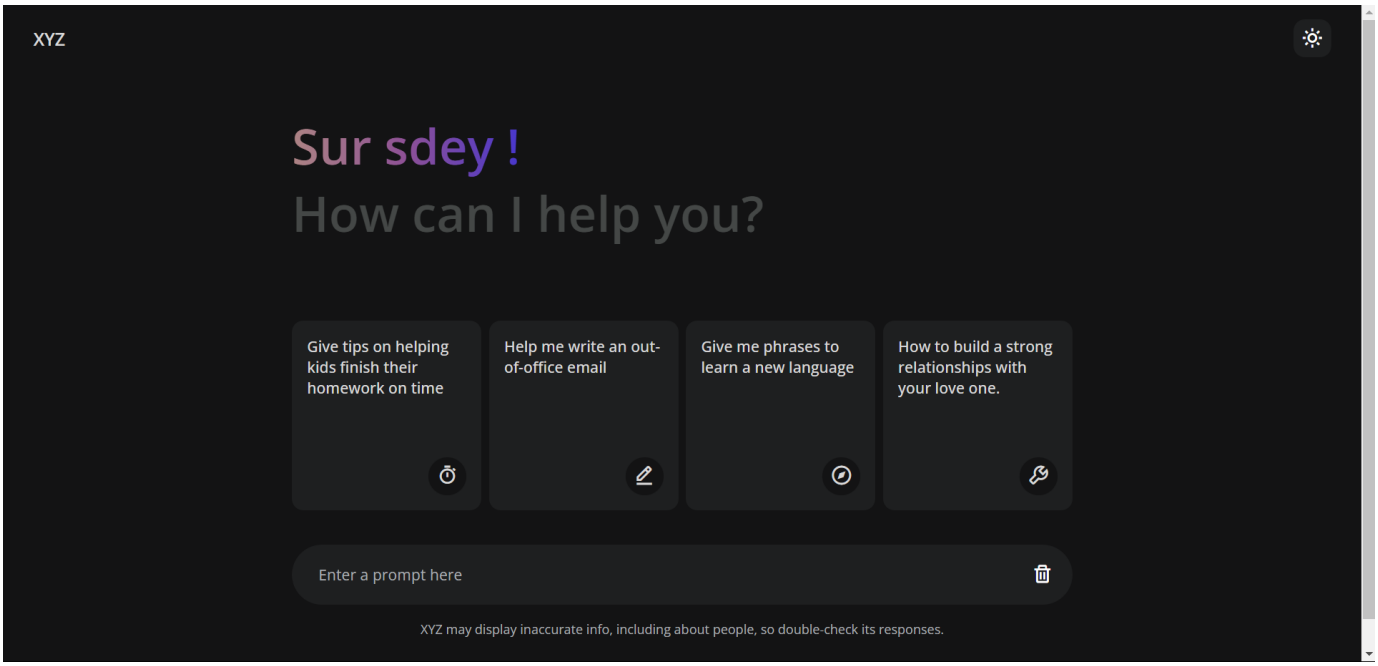
7. **Development process**

- Requirement Analysis
- Design
- Implementation
- Testing and Deployment
- Maintenance.

- **Project Result**

Figure 1- Home page

- Light and dark mode, Prompt recommendations, Generate Text



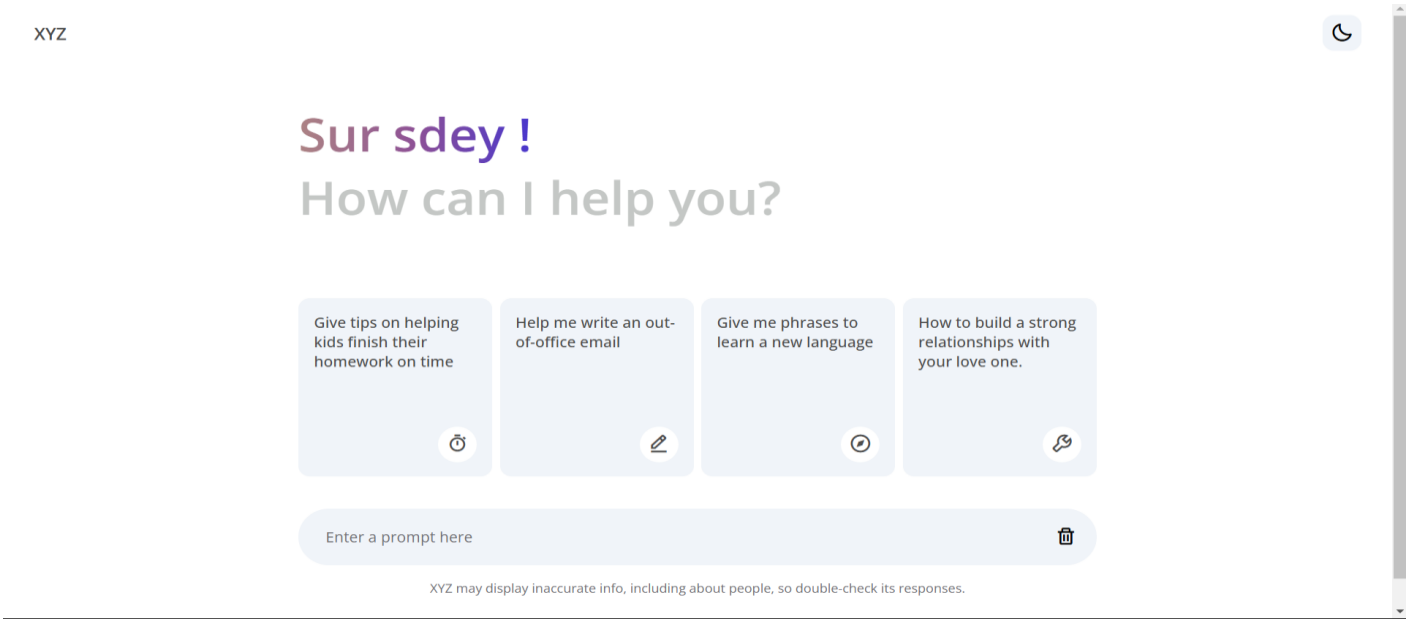
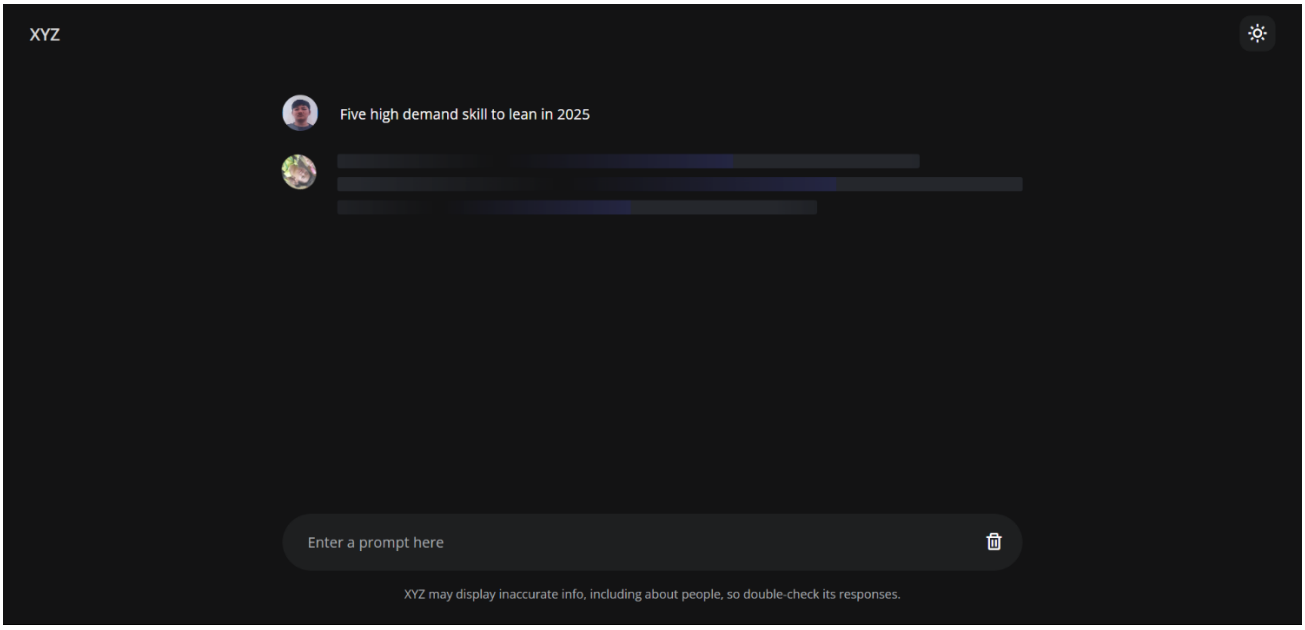
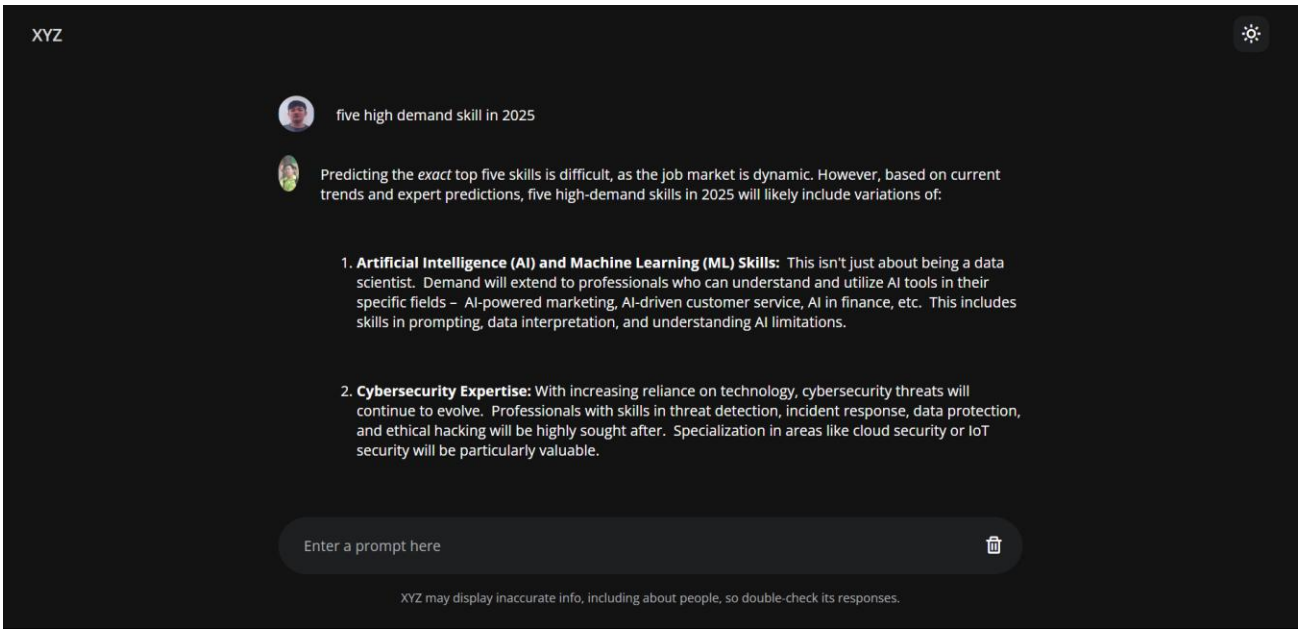


Figure 2





- **Presentation Slide**
  https://www.canva.com/design/DAGXYEI5z30/ONZOlSCsKqgSqXl3G7MV1Q/edit

- **GitHub For full Project**

  https://github.com/thiyaPhay/WCT-Y3-AI-ChatBot